

State of Montana
Department of Environmental Quality
Helena, Montana 59620

AIR QUALITY OPERATING PERMIT NUMBER OP0691-02

Operating Permit Renewal Application Received: **July 26, 2002**
Application Deemed Administratively Complete: **July 26, 2002**
Application Deemed Technically Complete: **September 15, 2003**
AFS Number: **030-053-0002A**

Date of Decision: **March 9, 2004**
Effective Date: **April 9, 2004**
Expiration Date: **April 9, 2009**

In accordance with the Montana Code Annotated sections 75-2-217 and 218, and the Administrative Rules of Montana (ARM) Title 17, Chapter 8, Subchapter 12, Operating Permit Program, ARM 17.8.1201, *et seq.*,

Montana Dakota Utilities Co.
Lewis and Clark Station
Southwest ¼, Section 9, Township 22 North, Range 59 East
400 North Fourth Street
Bismarck, North Dakota 58501

hereinafter, referred to as “MDU”, is authorized to operate a stationary source of air contaminants consisting of the emission units described in this permit. Until this permit expires or is modified or revoked, MDU is allowed to discharge air pollutants in accordance with the conditions of this permit. All conditions in this permit are federally and state enforceable unless otherwise specified. Requirements that are state only enforceable are identified as such in the permit. A copy of this permit must be kept on site at the above named facility.

Issued by the Department of Environmental Quality

Signature

Date

Permit Issuance and Appeal Process: In accordance with ARM 17.8.1210(j), the Department of Environmental Quality’s (Department) decision regarding issuance of an operating permit is not effective until 30 days have elapsed from the date of the decision issued March 9, 2004. The decision may be appealed to the Board of Environmental Review by filing a request for a hearing within 30 days after the date of decision. If no appeal is filed then the Department will send notification and a final permit cover page to be attached to this document stating that the permit is final. If EPA objects to the operating permit as a result of a petition prior to the Department’s notification of a final permit, April 9, 2004, and all affected parties will be informed of the stay of a final permit. If the Department has already notified MDU and all affected parties, the Department shall issue a revised permit according to ARM 17.8.1231. Questions regarding the final issuance date and status of appeals should be directed to the Department at (406) 444-3490.

Montana Air Quality Operating Permit
Department of Environmental Quality

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Terms not otherwise defined in this permit or in the Definitions and Abbreviations Appendix of this permit have the meaning assigned to them in the referenced regulations.

SECTION I. GENERAL INFORMATION

The following general information is provided pursuant to ARM 18.7.1210(1).

Company Name: Montana Dakota Utilities Co. (MDU), Lewis & Clark Station

Mailing Address: 400 North Fourth Street

City: Bismarck

State: North Dakota

Zip: 58501

Plant Location: Southwest ¼, Section 9, Township 22 North, Range 59 East, Richland County, Montana

Responsible Official: Andrea Stomberg

Phone: (701) 222-7752

Facility Contact Person: Jay Skabo

Phone: (701) 222-7835

Primary SIC Code: 4911

Nature of Business: Electric Services

Description of Process: MDU, Lewis & Clark Station operates a tangential coal-fired boiler capable of burning coal or natural gas and associated equipment for generation of electricity.

SECTION II. SUMMARY OF EMISSION UNITS

The emission units regulated by this permit are the following (ARM 17.8.1211):

Emissions Unit ID	Description	Pollution Control Device/Practice
EU01	Tangential Coal and Natural Gas Fired Boiler	Multi-Cyclone and Flooded Disc Wet Scrubber
EU07	Coal Storage Piles	None
EU08	Fugitive Coal, Ash, and Lime Handling	None

SECTION III. PERMIT CONDITIONS

The following requirements and conditions are applicable to the facility or to specific emission units located at the facility (ARM 17.8.1211, 1212, and 1213).

A. Facility-Wide

Conditions	Rule Citation	Rule Description	Pollutant/Parameter	Limit
A.1	ARM 17.8.304(1)	Visible Air Contaminants	Opacity	40%
A.2	ARM 17.8.304(2)	Visible Air Contaminants	Opacity	20%
A.3	ARM 17.8.308(1)	Particulate Matter, Airborne	Fugitive Opacity	20%
A.4	ARM 17.8.308(2)	Particulate Matter, Airborne	Reasonable Precautions	-----
A.5	ARM 17.8.308	Particulate Matter, Airborne	Reasonable Precaution, Construction	20%
A.6	ARM 17.8.309	Particulate Matter, Fuel Burning Equipment	Particulate Matter	$E = 0.882 * H^{-0.1664}$ or $E = 1.026 * H^{-0.233}$
A.7	ARM 17.8.310	Particulate Matter, Industrial Processes	Particulate Matter	$E = 4.10 * P^{0.67}$ or $E = 55 * P^{0.11} - 40$
A.8	ARM 17.8.322(4)	Sulfur Oxide Emissions, Sulfur in Fuel	Sulfur in Fuel (liquid or solid fuels)	1 lb/MMBtu fired
A.9	ARM 17.8.322(5)	Sulfur Oxide Emissions, Sulfur in Fuel	Sulfur in Fuel (gaseous)	50 gr/100 CF
A.10	ARM 17.8.324(3)	Hydrocarbon Emissions, Petroleum Products	Gasoline Storage Tanks	-----
A.11	ARM 17.8.324	Hydrocarbon Emissions, Petroleum Products	65,000 Gallon Capacity	-----
A.12	ARM 17.8.324	Hydrocarbon Emissions, Petroleum Products	Oil-effluent Water Separator	-----
A.13	ARM 17.8.1212	Reporting Requirements	Compliance Monitoring	-----
A.14	ARM 17.8.1207	Reporting Requirements	Annual Certification	-----

Conditions

- A.1. Pursuant to ARM 17.8.304(1), MDU shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed on or before November 23, 1968, that exhibit an opacity of 40% or greater averaged over 6 consecutive minutes, unless otherwise specified by rule or in this permit.
- A.2. Pursuant to ARM 17.8.304(2), MDU shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes, unless otherwise specified by rule or in this permit.
- A.3. Pursuant to ARM 17.8.308(1), MDU shall not cause or authorize the production, handling, transportation, or storage of any material unless reasonable precautions to control emissions of particulate matter are taken. Such emissions of airborne particulate matter from any stationary source shall not exhibit an opacity of 20% or greater averaged over 6 consecutive minutes, unless otherwise specified by rule or in this permit.
- A.4. Pursuant to ARM 17.8.308(2), MDU shall not cause or authorize the use of any street, road or parking lot without taking reasonable precautions to control emissions of airborne particulate matter, unless otherwise specified by rule or in this permit.

A.5. Pursuant to ARM 17.8.308, MDU shall not operate a construction site or demolition project unless reasonable precautions are taken to control emissions of airborne particulate matter. Such emissions of airborne particulate matter from any stationary source shall not exhibit an opacity of 20% or greater averaged over 6 consecutive minutes, unless otherwise specified by rule or in this permit.

A.6. Pursuant to ARM 17.8.309, unless otherwise specified by rule or in this permit, MDU shall not cause or authorize particulate matter caused by the combustion of fuel to be discharged from any stack or chimney into the outdoor atmosphere in excess of the maximum allowable emissions of particulate matter for existing fuel-burning equipment and new fuel-burning equipment calculated using the following equations:

For existing fuel burning equipment (installed before November 23, 1968):

$$E = 0.882 * H^{0.1664}$$

For new fuel burning equipment (installed on or after November 23, 1968):

$$E = 1.026 * H^{0.233}$$

Where H is the heat input capacity in million BTU (MMBtu) per hour and E is the maximum allowable particulate emissions rate in pounds per MMBtu.

A.7. Pursuant to ARM 17.8.310, unless otherwise specified by rule or in this permit, MDU shall not cause or authorize particulate matter to be discharged from any operation, process, or activity into the outdoor atmosphere in excess of the maximum hourly allowable emissions of particulate matter calculated using the following equations:

For process weight rates up to 30 tons per hour: $E = 4.10 * P^{0.67}$

For process weight rates in excess of 30 tons per hour: $E = 55.0 * P^{0.11} - 40$

Where E = rate of emissions in pounds per hour and P = process weight rate in tons per hour.

A.8. Pursuant to ARM 17.8.322(4), MDU shall not burn liquid or solid fuels containing sulfur in excess of 1 pound per million BTU fired, unless otherwise specified by rule or in this permit.

A.9. Pursuant to ARM 17.8.322(5), MDU shall not burn any gaseous fuel-containing sulfur compounds in excess of 50 grains per 100 cubic feet of gaseous fuel, calculated as hydrogen sulfide at standard conditions, unless otherwise specified by rule or in this permit.

A.10. Pursuant to ARM 17.8.324(3), MDU shall not load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank is equipped with a vapor loss control device or is a pressure tank as described in ARM 17.8.324(1), unless otherwise specified by rule or in this permit.

A.11. Pursuant to ARM 17.8.324, unless otherwise specified by rule or in this permit, MDU shall not place, store or hold in any stationary tank, reservoir or other container of more than 65,000 gallon capacity any crude oil, gasoline or petroleum distillate having a vapor pressure of 2.5 pounds per square inch absolute or greater under actual storage conditions, unless such tank, reservoir or other container is a pressure tank maintaining working pressure sufficient at all times to prevent hydrocarbon vapor or gas loss to the atmosphere, or is designed and equipped with a vapor loss control device, properly installed, in good working order and in operation.

A.12. Pursuant to ARM 17.8.324, unless otherwise specified by rule or in this permit, MDU shall not use any compartment of any single or multiple compartment oil-effluent water separator which compartment receives effluent water containing 200 gallons a day or more of any petroleum product from any equipment processing, refining, treating, storing or handling kerosene or other petroleum product of equal or greater volatility than kerosene, unless such compartment is equipped with a vapor loss control device, constructed to prevent emission of hydrocarbon vapors to the atmosphere, properly installed, in good working order and in operation.

- A.13. On or before January 31 and July 31 of each year, MDU shall submit to the Department the compliance monitoring reports required by Section V.D. These reports must contain all information required by Section V.D, as well as the information required by each individual emissions unit. For the reports due by January 31 of each year, MDU may submit a single report, provided that it contains all the information required by Section V.B & V.D. Per ARM 17.8.1207,

any application form, report, or compliance certification submitted pursuant to ARM Title 17, Chapter 8, Subchapter 12 (including semiannual monitoring reports), shall contain certification by a responsible official of truth, accuracy and completeness. This certification and any other certification required under ARM Title 17, Chapter 8, Subchapter 12, shall state that, “based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.”

- A.14. By January 31 of each year, MDU shall submit to the Department the compliance certification report required by Section V.B. The annual certification report required by Section V.B must include a statement of compliance based on the information available that identifies any observed, documented or otherwise known instance of noncompliance for each applicable requirement. Per ARM 17.8.1207,

any application form, report, or compliance certification submitted pursuant to ARM Title 17, Chapter 8, Subchapter 12 (including annual certifications), shall contain certification by a responsible official of truth, accuracy and completeness. This certification and any other certification required under ARM Title 17, Chapter 8, Subchapter 12, shall state that, “based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.”

B. EU01–Tangential Coal-Fired Boiler (Coal & Natural Gas)

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration Method	Frequency	Reporting Requirements
B.1., B.13., B.14., B.20., B.22, B.23, B.28, B.29.	Opacity	40%	Method 9	As Required by the Department	Semiannually
			Predictive Opacity	Ongoing	Quarterly
B.2., B.15., B.16, B.18., B.22., B.28.	Particulate Matter Fuel Burning	.17 lb/MMBtu	Method 5	Annual	Semiannually
		8 gr/dscf			
B.3., B.4., B.17., B.18., B.19., B.20.	SO ₂ Emissions	1.0 lb/MMBtu	Continuous Scrubber Operations	Ongoing	Semiannually
		50 gr sulfur/100 CF fuel	Record Keeping	Ongoing	Semiannually
B.5, B.11., B.19., B.24.	NO _x Emissions/Acid Rain Provisions	0.45 lb/MMBtu	Continuous Scrubber Operations & CEMS	Ongoing	Semiannually
B.6., B.7., B.8., B.9., B.10., B.25., B.26., B.30	Acid Rain Provision	40 CFR 72-78	40 CFR 72-78	40 CFR 72-78	Semiannually
B.12., B.20., B.27., B.31	PM CAM Plan	ARM 17.8.1506	Provisions from CAM Plan, Appendix I	Ongoing	Semiannually

Conditions

- B.1. MDU may not cause or authorize emissions from the Tangential Coal-Fired Boiler (boiler) to be discharged into the outdoor atmosphere that exhibit an opacity of 40% or greater averaged over 6 consecutive minutes (ARM 17.8.304 (2)).
- B.2. Particulate matter emissions from the boiler shall not exceed 0.17 lb/MMBtu or 0.08 gr/dscf (ARM 17.8.752).
- B.3. MDU shall not fire in the boiler liquid or solid fuels containing sulfur in excess of 1.0 lb of sulfur/MMBtu (ARM 17.8.752).
- B.4. MDU shall not fire in the boiler any fuels in excess of 50 grains of sulfur/100 cubic feet of gaseous fuel (ARM 17.8.322).
- B.5. NO_x emissions from the boiler shall not exceed 0.45 lb/MMBtu (ARM 17.8.752).
- B.6. MDU shall comply with all requirements in the Acid Rain Appendix H of this permit including the operation and maintenance of SO₂ and NO_x continuous monitoring systems (CEMS) (ARM 17.8.1210(3)).
- B.7. Emissions shall not be permitted in excess of any allowances that MDU lawfully holds under Title IV of the FCAA or the regulations promulgated thereunder (ARM 17.8.1210(3)(a)).
- B.8. Permit revision is not required for increases in emissions authorized by allowances acquired pursuant to the acid rain program, provided that such increases do not require a permit revision under any other applicable requirement (ARM 17.8.1210(3)(b)).
- B.9. MDU may not use allowances as a defense to noncompliance with any other applicable requirement (ARM 17.8.1210(3)(c)).
- B.10. Any allowances shall be accounted for according to the procedures established in regulations promulgated under Title IV of the FCAA (ARM 17.8.1210(3)(d)).
- B.11. MDU shall not be subject to any revised NO_x emissions limitation for Group 1 boilers that the administrator (EPA) may issue pursuant to Section 407(b)(2) of the FCAA until January 1, 2008, provided that the designated representative demonstrates that the unit is in compliance with the limitation under §76.5(a) (40 CFR §76.8).
 - a. Pursuant to 40 CFR §76.8, if the designated representative is not able to demonstrate compliance with the limitation, then the early election plan will be terminated.
 - b. Pursuant to 40 CFR §76.8(e), the designated representative of the unit may terminate the plan any year prior to 2008, but may not submit a new early election plan. In order to terminate the plan, the designated representative must submit a notice under 40 CFR § 72.40(d) by January 1 of the year for which the termination is to take effect.
- B.12. MDU shall provide a reasonable assurance of compliance with emission limitations or standards for the anticipated range of operations at the Tangential Coal-fired Boiler for PM (ARM 17.8.1504).

Compliance Demonstration

- B.13. MDU shall perform a Method 9 opacity test on the boiler annually while the boiler is being fired exclusively on coal to monitor compliance with the opacity limitation in Section III.B.1. The testing shall be performed in accordance with the Predictive Opacity Appendix E of this permit (ARM 17.8.749 and ARM 17.8.106).

- B.14. MDU shall operate and maintain and operate the predictive opacity monitoring system to monitor compliance with the opacity limitation in Section III.B.1. The testing shall be performed in accordance with the Predictive Opacity Appendix E of this permit (40 CFR Part 51, Appendix P, §3.9 and ARM 17.8.749).
- B.15. MDU shall perform a Method 5 or Method 5B particulate matter test, or another method approved by the Department, on the boiler annually to monitor compliance with the particulate matter fuel burning limit in Section III.B.2. The testing shall be performed in accordance with the Montana Source Test Protocol and Procedures Manual while the boiler is being fired exclusively on coal (ARM 17.8.749 and ARM 17.8.106).
- B.16. MDU shall operate the scrubber when the boiler is operating to monitor compliance with the emission limit in III.B.3 (ARM 17.8.322(6)(c)).
- B.17. MDU shall burn only pipeline quality natural gas in the emissions unit when burning gaseous fuel to monitor compliance with the emission limit of 50 grains of Sulfur/100 cf of gaseous fuel (ARM 17.8.1213).
- B.18. MDU shall monitor compliance with emission limits in III.B.4 pursuant to the requirements in 40 CFR Part 75, 40 CFR Part 76 and the NO_x CEMS Appendix F in this permit (ARM 17.8.1212).
- B.19. MDU shall monitor compliance with the Acid Rain Provisions according to 40 CFR 72-78, including monitoring as described in the SO₂ CEMS Appendix F and NO_x CEMS Appendix G of this permit (ARM 40 CFR 72-78).
- B.20. MDU shall monitor compliance by following the Compliance Assurance Monitoring (CAM) Plan (Appendix I). The CAM Plan, written by MDU in accordance with ARM 17.8.1504 is summarized in Appendix I and is available in full upon request by the Department or the facility (ARM 17.8.1503 and ARM 17.8.1213).

Recordkeeping

- B.21. MDU shall maintain, on site, an operations and maintenance log which includes the type of fuel fired in the boiler on a daily basis (ARM 17.8.1212).
- B.22. All source testing recordkeeping shall be performed in accordance with the Source Test Protocol and Procedures Manual, and shall be maintained on site. Method 9 source test reports for opacity need not be submitted unless requested by the Department (ARM 17.8.106).
- B.23. Records shall be prepared and data kept in accordance with the Predictive Opacity Monitoring System Appendix E of this permit (ARM 17.8.1212).
- B.24. MDU shall verify continuous scrubber operation by maintaining a log of scrubber downtime and maintenance with respect to boiler operations (ARM 17.8.1212).
- B.25. MDU shall verify that only pipeline quality natural gas is being burned in the boiler by maintaining a log of the Federal Energy Regulatory Commission (FERC) certifications (ARM 17.8.1212).
- B.26. Records shall be prepared and data kept in accordance with 40 CFR Part 75, the SO₂ CEMS Appendix F, and the NO_x CEMS Appendix G of this permit (ARM 17.8.1212 and 40 CFR 72-78).
- B.27. Records shall be prepared and data kept in accordance with 40 CFR Part 64 and the CAM Appendix I of this permit (ARM 17.8.1212 and 40 CFR 64).

Reporting

- B.28. The Method 5, Method 5B, and Method 9 test reports as specified in Section III.B.13. shall be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- B.29. Reporting for the Predictive Opacity Monitoring System shall be performed according to Appendix E of this permit (ARM 17.8.1212).
- B.30. Reporting for the Acid Rain Provisions shall be performed according to 40 CFR 72-78 (40 CFR 72-78).
- B.31. Reporting for the CAM plan shall be performed according to ARM 17.8.1212(3)(b) and (c) and ARM 17.8.1513 (ARM 17.8.1212 and ARM 17.8.1513).
- B.32. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements. The semiannual reporting shall provide (ARM 17.8.1212):
- Verification that the log of fuel type fired was maintained;
 - Results of any Method 9 test conducted during the period; the actual test report need only be submitted to the Department, upon request, as specified by Section III.B.13;
 - Verification of submittal of quarterly Predictive Opacity Monitoring System Reports;
 - Results of any Method 5 or 5B source tests conducted in the period; the actual test report should be submitted, as specified by Section III.B.13;
 - A summary of any downtime and maintenance work performed on the wet scrubber, and verification of use;
 - Verification that only pipeline quality natural gas was used in the boiler when firing gaseous fuel;
 - Verification of compliance with 40 CFR Part 75, NO_x Appendix H, CEMS Appendix G and SO₂ Appendix F.
 - Verification of compliance with 40 CFR Part 64 (CAM), Appendix I.

C. EU07 - Coal Storage Piles

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration Method Frequency		Reporting Requirement
C.1, C.3, C.4., C.5, C.6	Opacity	20% and Reasonable Precautions	Method 9	Semiannually	Semiannually
			Visual Surveys	Once per Calendar Week	Semiannually

Conditions

- C.1. MDU may not cause or authorize emissions from the Coal Storage Piles to be discharged into the outdoor atmosphere that exhibit an opacity of 40% or greater averaged over 6 consecutive minutes (ARM 17.8.304(2)).

- C.2. MDU shall not cause or authorize the production, handling, transportation, or storage of any material unless reasonable precautions to control emissions of particulate matter are taken. Such emissions of airborne particulate from any stationary source shall not exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.308(1)).

Compliance Demonstration

- C.3. Opacity is monitored in accordance with the requirements of 40 CFR Part 60, Appendix A, Method 9, or by an in-stack transmissometer complying with 40 CFR Part 60, Appendix B, Performance Specification 1. For purposes of compliance certification, MDU shall conduct either a semiannual Method 9 source test or a weekly visual survey of visible emissions on the coal storage piles.

Under the visual survey option, once per calendar week, during daylight hours, MDU shall visually survey the coal storage piles for any sources of excessive emissions. For the purpose of this survey, excessive emissions are considered to be any visible emissions that meet or exceed 15% opacity. The person conducting the survey does not have to be an EPA Method 9 certified observer. However, the individual must have been certified as a Method 9 observer within the previous 2 years of the visual survey being performed. If sources of excessive emissions are identified, MDU shall immediately conduct a Method 9 or take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then MDU shall immediately conduct a subsequent visual survey to monitor compliance. The person conducting the visual survey shall record the results of the survey in a log, including any corrective action taken. Conducting a visual survey does not relieve MDU of a liability for a violation determined using Method 9 (ARM 17.8.101(27)).

If visual surveys are not conducted once per calendar week as specified above during the reporting period, MDU shall perform Method 9 source tests for the coal storage piles for that reporting period. Method 9 source tests must be performed in accordance with the Montana Source Test Protocol and Procedures Manual, except that prior notification of the test is not required. Each observation period must be a minimum of 6 minutes unless any one reading is 20% or greater, then the observation period must be a minimum of 20 minutes or until a violation of the standard has been documented, whichever is a shorter period of time (ARM 17.8.1213).

Recordkeeping

- C.4. All source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106). If visual surveys are performed, MDU shall maintain a log to verify that the visual surveys were performed as specified in Section III.C.3. Each log entry must include the date, time, results of survey, and observer's initials. Whether visual surveys or Method 9 source tests are conducted, if any corrective action is required, the time, date, observer's initials, and any preventative or corrective action taken must be recorded in the log (ARM 17.8.1212).

Reporting

- C.5. All source test reports must be submitted to the Department in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- C.6. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements. The semiannual reporting shall provide (ARM 17.8.1212):
- a. Verification that the visual surveys were performed and logged as specified by Section III.C.3 or Method 9 source test results, and
 - b. Verification that a log of corrective actions was maintained as specified by Section III.C.4.

D. EU08 – Fugitive Coal, Ash, and Lime Handling

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration Method	Frequency	Reporting Requirement
D.1, D.2, D.3, D.4, D.5, D.6	Opacity	20% and Reasonable Precautions	Method 9	Semiannually	Semiannually
			Visual Surveys	Once per Calendar Week	Semiannually

Conditions

- D.1. MDU may not cause or authorize emissions from the fugitive coal, ash, and lime handling to be discharged into the outdoor atmosphere that exhibit an opacity of 40% or greater averaged over 6 consecutive minutes (ARM 17.8.304(2)).
- D.2. MDU shall not cause or authorize the production, handling, transportation, or storage of any material unless reasonable precautions to control emissions of particulate matter are taken. Such emissions of airborne particulate from any stationary source shall not exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.308(1)).

Compliance Demonstration

- D.3 Opacity is monitored in accordance with the requirements of 40 CFR Part 60, Appendix A, Method 9, or by an in-stack transmissometer complying with 40 CFR Part 60, Appendix B, Performance Specification 1. For purposes of compliance certification, MDU shall conduct either a semiannual Method 9 source test or a weekly visual survey of visible emissions on the coal storage piles.

Under the visual survey option, once per calendar week, during daylight hours, MDU shall visually survey the coal storage piles for any sources of excessive emissions. For the purpose of this survey, excessive emissions are considered to be any visible emissions that meet or exceed 15% opacity. The person conducting the survey does not have to be an EPA Method 9 certified observer. However, the individual must have been certified as a Method 9 observer within the previous 2 years of the visual survey being performed. If sources of excessive emissions are identified, MDU shall immediately conduct a Method 9 or take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then MDU shall immediately conduct a subsequent visual survey to monitor compliance. The person conducting the visual survey shall record the results of the survey in a log, including any corrective action taken. Conducting a visual survey does not relieve MDU of a liability for a violation determined using Method 9 (ARM 17.8.101(27)).

If visual surveys are not conducted once per calendar week as specified above during the reporting period, MDU shall perform Method 9 source tests for the coal storage piles for that reporting period. Method 9 source tests must be performed in accordance with the Montana Source Test Protocol and Procedures Manual, except that prior notification of the test is not required. Each observation period must be a minimum of 6 minutes unless any one reading is 20% or greater, then the observation period must be a minimum of 20 minutes or until a violation of the standard has been documented, whichever is a shorter period of time (ARM 17.8.1213).

Recordkeeping

- D.4. All source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106). If visual surveys are performed, MDU shall maintain a log to verify that the visual surveys were performed as specified in Section III.D.2. Each log entry must include the date, time, results of survey, and observer's initials. Whether visual surveys or Method 9 source tests are conducted, if any corrective action is required, the time, date, observer's initials, and any preventative or corrective action taken must be recorded in the log (ARM 17.8.1212).

Reporting

- D.5. All source test reports must be submitted to the Department in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- D.6. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements. The semiannual reporting shall provide (ARM 17.8.1212):
 - a. Verification that the visual surveys were performed and logged as specified by Section III.D.4 or Method 9 source test results; and
 - b. Verification that a log of corrective actions was maintained as specified by Section III.D.5.

SECTION IV. NON-APPLICABLE REQUIREMENTS

Air Quality Administrative Rules of Montana (ARM) and Federal Regulations identified as not applicable to the facility or to a specific emissions unit at the time of the permit issuance are listed below (ARM 17.8.1214). The following list does not preclude the need to comply with any new requirements that may become applicable during the permit term.

A. Facility-Wide

The following table contains non-applicable requirements, which are administrated by the Air and Waste Management Bureau of the Department of Environmental Quality.

Rule Citation		Reason
State	Federal	
ARM 17.8.321, ARM 17.8.323, ARM 17.8.610		These rules are not applicable because the facility is not listed in the source category cited in the rules.
ARM 17.8.320		These rules are not applicable because the facility does not have the specific emissions unit cited in the rules.
	40 CFR 60, Subparts C, Ca, Cb 40 CFR 60, Subparts D, Da, Db, Dc 40 CFR 60, Subparts E-J 40 CFR 60, Subparts K, Ka, Kb 40 CFR 60, Subparts L-Z 40 CFR 60, Subparts AA-EE 40 CFR 60, Subparts GG-HH 40 CFR 60, Subparts KK-NN 40 CFR 60, Subparts PP-XX 40 CFR 60, Subparts AAA-BBB 40 CFR 60, Subparts DDD 40 CFR 60, Subparts FFF-LLL 40 CFR 60, Subparts NNN-VVV 40 CFR 61, Subparts B-F 40 CFR 61, Subparts H-L 40 CFR 61, Subparts N-R 40 CFR 61, Subpart T 40 CFR 61, Subparts V-W 40 CFR 61, Subpart Y 40 CFR 61, Subpart BB 40 CFR 61, Subpart FF	These requirements are not applicable because the facility is not an affected source as defined in these regulations.
	40 CFR 63, Subparts F-I 40 CFR 63, Subparts L-M 40 CFR 63, Subpart Q 40 CFR 82, Subparts A-E 40 CFR 82, Subparts G-H	These requirements are not applicable because the facility is not an affected source as defined in these regulations.

B. Emission Units

The permit application identified applicable and non-applicable requirements. After review of the application, the Department has listed all non-applicable requirements in Section IV.A. These requirements relate to each specific unit, as well as facility wide.

SECTION V. GENERAL PERMIT CONDITIONS

A. Compliance Requirements

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(a)-(c)&(e), §1206(6)(c)&(b)

1. The permittee must comply with all conditions of the permit. Any noncompliance with the terms or conditions of the permit constitutes a violation of the Montana Clean Air Act, and may result in enforcement action, permit modification, revocation and reissuance, or termination, or denial of a permit renewal application under ARM Title 17, Chapter 8, Subchapter 12.
2. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
3. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. If appropriate, this factor may be considered as a mitigating factor in assessing a penalty for noncompliance with an applicable requirement if the source demonstrates that both the health, safety or environmental impacts of halting or reducing operations would be more serious than the impacts of continuing operations, and that such health, safety or environmental impacts were unforeseeable and could not have otherwise been avoided.
4. MDU shall furnish to the Department, within a reasonable time set by the Department (not to be less than 15 days), any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, MDU shall also furnish to the Department copies of those records that are required to be kept pursuant to the terms of the permit. This subsection does not impair or otherwise limit the right of the permittee to assert the confidentiality of the information requested by the Department, as provided in 75-2-105, MCA.
5. Any schedule of compliance for applicable requirements with which the source is not in compliance with at the time of permit issuance shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it was based.
6. For applicable requirements that will become effective during the permit term, the source shall meet such requirements on a timely basis unless a more detailed plan or schedule is required by the applicable requirement or the Department.

B. Certification Requirements

ARM 17.8, Subchapter 12, Operating Permit Program §1207 and §1213(7)(a)&(c)-(d)

1. Any application form, report, or compliance certification submitted pursuant to ARM Title 17, Chapter 8, Subchapter 12, shall contain certification by a responsible official of truth, accuracy and completeness. This certification and any other certification required under ARM Title 17, Chapter 8, Subchapter 12, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
2. Compliance certifications shall be submitted by January 31 of each year, or more frequently if otherwise specified in an applicable requirement or elsewhere in the permit. Each certification must include the required information for the previous calendar year (i.e., January 1 – December 31).
3. Compliance certifications shall include the following:
 - a. The identification of each term or condition of the permit that is the basis of the certification;

- b. The identification of the method(s) or other means used by the owner or operator for determining the status of compliance with each term or condition during the certification period, and whether such methods or other means provide continuous or intermittent data, as well as the additional information required by ARM 17.8.1213(7)(c)(ii);
 - c. The status of compliance with the terms and conditions of the permit for the period covered by the certification, *including whether compliance during the period was continuous or intermittent* (based on the method or means designated in ARM 17.8.1213(7)(c)(ii), as described above); and
 - d. Such other facts as the Department may require to determine the compliance status of the source.
4. All compliance certifications must be submitted to the Environmental Protection Agency, as well as to the Department, at the addresses listed in the Notification Addresses Appendix of this permit.

C. Permit Shield

ARM 17.8, Subchapter 12, Operating Permit Program §1214(1)-(4)

- 1. The applicable requirements and non-federally enforceable requirements are included and specifically identified in this permit and the permit includes a precise summary of the requirements not applicable to the source. Compliance with the conditions of the permit shall be deemed compliance with any applicable requirements and any non-federally enforceable requirements as of the date of permit issuance.
- 2. The permit shield described in 1 above shall remain in effect during the appeal of any permit action (renewal, revision, reopening, or revocation and reissuance) to the Board of Environmental Review (Board), until such time as the Board renders its final decision.
- 3. Nothing in this permit alters or affects the following:
 - a. The provisions of Sec. 7603 of the FCAA, including the authority of the administrator under that section.
 - b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance.
 - c. The applicable requirements of the Acid Rain Program, consistent with Sec. 7651g(a) of the FCAA.
 - d. The ability of the administrator to obtain information from a source pursuant to Sec. 7414 of the FCAA.
 - e. The ability of the Department to obtain information from a source pursuant to the Montana Clean Air Act, Title 75, Chapter 2, MCA.
 - f. The emergency powers of the Department under the Montana Clean Air Act, Title 75, Chapter 2, MCA.
 - g. The ability of the Department to establish or revise requirements for the use of Reasonably Available Control Technology (RACT) as defined in ARM Title 17, Chapter 8. However, if the inclusion of a RACT into the permit pursuant to ARM Title 17, Chapter 8, Subchapter 12, is appealed to the Board, the permit shield, as it applies to the source's existing permit, shall remain in effect until such time as the Board has rendered its final decision.

4. Nothing in this permit alters or affects the ability of the Department to take enforcement action for a violation of an applicable requirement or permit term demonstrated pursuant to ARM 17.8.106, Source Testing Protocol.
5. Pursuant to ARM 17.8.132, for the purpose of submitting a compliance certification, nothing in these rules shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a source would have been in compliance. However, when compliance or noncompliance is demonstrated by a test or procedure provided by permit or other applicable requirements, the source shall then be presumed to be in compliance or noncompliance unless that presumption is overcome by other relevant credible evidence.
6. The permit shield will not extend to minor permit modifications or changes not requiring a permit revision (see Sections I & J).
7. The permit shield will extend to significant permit modifications and transfer or assignment of ownership (see Sections K & N).

D. Monitoring, Recordkeeping, and Reporting Requirements

ARM 17.8, Subchapter 12, operating Permit Program §1212(2)&(3)

1. Unless otherwise provided in this permit, the permittee shall maintain compliance monitoring records that include the following information:
 - a. The date, place as defined in the permit, and time of sampling or measurement;
 - b. The date(s) analyses were performed;
 - c. The company or entity that performed the analyses;
 - d. The analytical techniques or methods used;
 - e. The results of such analyses; and
 - f. The operating conditions at the time of sampling or measurement.
2. The permittee shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. All monitoring data, support information, and required reports and summaries may be maintained in computerized form at the plant site if the information is made available to Department personnel upon request, which may be for either hard copies or computerized format. Strip-charts must be maintained in their original form at the plant site and shall be made available to Department personnel upon request.
3. The permittee shall submit to the Department, at the addresses located in the Notification Addresses Appendix of this permit, reports of any required monitoring by January 31 and July 31 of each year, or more frequently if otherwise specified in an applicable requirement or elsewhere in the permit. The monitoring report submitted on January 31 of each year must include the required monitoring information for the period of July 1 through December 31 of the previous year. The monitoring report submitted on July 31 of each year must include the required monitoring information for the period of January 1 through June 30 of the current year. All instances of deviations from the permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official, consistent with ARM 17.8.1207.

E. Prompt Deviation ReportingARM 17.8, Subchapter 12, Operating Permit Program §1212(3)(c)

The permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. To be considered prompt, deviations shall be reported as part of the routine reporting requirements under ARM 17.8.1212(3)(b) and, if applicable, in accordance with the malfunction reporting requirements under ARM 17.8.110, unless otherwise specified in an applicable requirement.

F. Emergency ProvisionsARM 17.8, Subchapter 12, Operating Permit Program §1201(13) and §1214(5), (6)&(8)

1. An “emergency” means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation and causes the source to exceed a technology-based emission limitation under this permit due to the unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of reasonable preventive maintenance, careless or improper operation, or operator error.
2. An emergency constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the permittee demonstrates through properly signed, contemporaneous logs, or other relevant evidence, that:
 - a. An emergency occurred and the permittee can identify the cause(s) of the emergency.
 - b. The permitted facility was at the time being properly operated.
 - c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in the permit.
 - d. The permittee submitted notice of the emergency to the Department within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice fulfills the requirements of ARM 17.8.1212(3)(c). This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
3. These emergency provisions are in addition to any emergency, malfunction or upset provision contained in any applicable requirement.

G. Inspection and EntryARM 17.8, Subchapter 12, Operating Permit Program §1213(3)&(4)

1. Upon presentation of credentials and other requirements as may be required by law, the permittee shall allow the Department, the administrator, or an authorized representative (including an authorized contractor acting as a representative of the Department or the administrator) to perform the following:
 - a. Enter the premises where a source required to obtain a permit is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit.
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit.
 - c. Inspect at reasonable times any facilities, emission units, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.

- d. As authorized by the Montana Clean Air Act and rules promulgated thereunder, sample or monitor, at reasonable times, any substances or parameters at any location for the purpose of assuring compliance with the permit or applicable requirements.
2. The permittee shall inform the inspector of all workplace safety rules or requirements at the time of inspection. This section shall not limit in any manner the Department's statutory right of entry and inspection as provided for in 75-2-403, MCA.

H. Fee Payment

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(f) and ARM 17.8, Subchapter 5, Air Quality Permit Application, Operation, and Open Burning Fees §505(3)-(5) (STATE ONLY)

1. The permittee must pay application and operating fees, pursuant to ARM Title 17, Chapter 8, Subchapter 5.
2. Annually, the Department shall provide the permittee with written notice of the amount of the fee and the basis for the fee assessment. The air quality operation fee is due 30 days after receipt of the notice, unless the fee assessment is appealed pursuant to ARM 17.8.511. If any portion of the fee is not appealed, that portion of the fee that is not appealed is due 30 days after receipt of the notice. Any remaining fee, which may be due after the completion of an appeal, is due immediately upon issuance of the Board's decision or upon completion of any judicial review of the Board's decision.
3. If the permittee fails to pay the required fee (or any required portion of an appealed fee) within 90 days of the due date of the fee, the Department may impose an additional assessment of 15% of the fee (or any required portion of an appealed fee) or \$100, whichever is greater, plus interest on the fee (or any required portion of an appealed fee), computed at the interest rate established under 15-31-510(3), MCA.

I. Minor Permit Modifications

ARM 17.8, Subchapter 12, Operating Permit Program §1226(3)&(11)

1. An application for a minor permit modification need only address in detail those portions of the permit application that require revision, updating, supplementation, or deletion, and may reference any required information that has been previously submitted.
2. The permit shield under ARM 17.8.1214 will not extend to any minor modifications processed pursuant to ARM 17.8.1226.

J. Changes Not Requiring Permit Revision

ARM 17.8, Subchapter 12, Operating Permit Program §1224(1)-(3), (5)&(6)

1. The permittee is authorized to make changes within the facility as described below, provided the following conditions are met.
 - a. The proposed changes do not require the permittee to obtain an air quality preconstruction permit under ARM Title 17, Chapter 8, Subchapter 7.
 - b. The proposed changes are not modifications under Title I of the FCAA, or as defined in ARM Title 17, Chapter 8, Subchapters 8, 9, or 10.
 - c. The emissions resulting from the proposed changes do not exceed the emissions allowable under this permit, whether expressed as a rate of emissions or in total emissions.
 - d. The proposed changes do not alter permit terms that are necessary to enforce applicable emission limitations on emission units covered by the permit.

- e. The facility provides the administrator and the Department with written notification at least 7 days prior to making the proposed changes.
2. The permittee and the Department shall attach each notice provided pursuant to 1.e above to their respective copies of this permit.
3. Pursuant to the conditions above, the permittee is authorized to make Section 502(b)(10) changes, as defined in ARM 17.8.1201(30), without a permit revision. For each such change, the written notification required under 1.e above shall include a description of the change within the source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.
4. The permittee may make a change not specifically addressed or prohibited by the permit terms and conditions without requiring a permit revision, provided the following conditions are met:
 - a. Each proposed change does not weaken the enforceability of any existing permit conditions.
 - b. The Department has not objected to such change.
 - c. Each proposed change meets all applicable requirements and does not violate any existing permit term or condition.
 - d. The permittee provides contemporaneous written notice to the Department and the administrator of each change that is above the level for insignificant emission units as defined in ARM 17.8.1201(22) and 17.8.1206(3), and the written notice describes each such change, including the date of the change, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.
5. The permit shield authorized by ARM 17.8.1214 shall not apply to changes made pursuant to ARM 17.8.1224(3) and (5), but is applicable to terms and conditions that allow for increases and decreases in emissions pursuant to ARM 17.8.1224(4).

K. Significant Permit Modifications

ARM 17.8, Subchapter 12, Operating Permit Program §1227(1), (3)&(4)

1. The modification procedures set forth in 2 below must be used for any application requesting a significant modification of this permit. Significant modifications include the following:
 - a. Any permit modification that does not qualify as either a minor modification or as an administrative permit amendment;
 - b. Every significant change in existing permit monitoring terms or conditions;
 - c. Every relaxation of permit reporting or recordkeeping terms or conditions that limit the Department's ability to determine compliance with any applicable rule, consistent with the requirements of the rule; or
 - d. Any other change determined by the Department to be significant.
2. Significant modifications shall meet all requirements of ARM Title 17, Chapter 8, including those for applications, public participation, and review by affected states and the administrator, as they apply to permit issuance and renewal, except that an application for a significant permit modification need only address in detail those portions of the permit application that require revision, updating, supplementation or deletion.
3. The permit shield provided for in ARM 17.8.1214 shall extend to significant modifications.

L. Reopening for Cause

ARM 17.8, Subchapter 12, Operating Permit Program §1228(1)&(2)

1. This permit may be reopened and revised under the following circumstances.
 - a. Additional applicable requirements under the FCAA become applicable to the facility when the permit has a remaining term of 3 or more years. Reopening and revision of the permit shall be completed not later than 18 months after promulgation of the applicable requirement. No reopening is required under ARM 17.8.1228(1)(a) if the effective date of the applicable requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms or conditions have been extended pursuant to ARM 17.8.1220(12) or 17.8.1221(2).
 - b. Additional requirements (including excess emission requirements) become applicable to an affected source under the Acid Rain Program. Upon approval by the administrator, excess emission offset plans shall be deemed incorporated into the permit.
 - c. The Department or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emission standards or other terms or conditions of the permit.
 - d. The administrator or the Department determines that the permit must be revised or revoked and reissued to ensure compliance with the applicable requirements.

M. Permit Expiration and Renewal

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(g), §1220(11)&(12), and §1205(2)(d)

1. This permit is issued for a fixed term of 5 years.
2. Renewal of this permit is subject to the same procedural requirements that apply to permit issuance, including those for application, content, public participation, and affected state and administrator review.
3. Expiration of this permit terminates the permittee's right to operate unless a timely and administratively complete renewal application has been submitted consistent with ARM 17.8.1221 and 17.8.1205(2)(d). If a timely and administratively complete application has been submitted, all terms and conditions of the permit, including the application shield, remain in effect after the permit expires until the permit renewal has been issued or denied.
4. For renewal, the permittee shall submit a complete air quality operating permit application to the Department not later than 6 months prior to the expiration of this permit, unless otherwise specified. If necessary to ensure that the terms of the existing permit will not lapse before renewal, the Department may specify, in writing to the permittee, a longer time period for submission of the renewal application. Such written notification must be provided at least 1 year before the renewal application due date established in the existing permit.

N. Severability Clause

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(i)&(l)

1. The administrative appeal or subsequent judicial review of the issuance by the Department of an initial permit under this subchapter shall not impair in any manner the underlying applicability of all applicable requirements, and such requirements continue to apply as if a final permit decision had not been reached by the Department.
2. If any provision of a permit is found to be invalid, all valid parts that are severable from the invalid part remain in effect. If a provision of a permit is invalid in one or more of its applications, the provision remains in effect in all valid applications that are severable from the invalid applications.

O. Transfer or Assignment of Ownership

ARM 17.8, Subchapter 12, Operating Permit Program §1225(2)&(4)

1. If an administrative permit amendment involves a change in ownership or operational control, the applicant must include in its request to the Department a written agreement containing a specific date for the transfer of permit responsibility, coverage and liability between the current and new permittee.
2. The permit shield provided for in ARM17.8.1214 shall not extend to administrative permit amendments.

P. Emissions Trading, Marketable Permits, Economic Incentives

ARM 17.8, Subchapter 12, Operating Permit Program §1226(2)

Notwithstanding ARM 17.8.1226(1) and (7), minor air quality operating permit modification procedures may be used for permit modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches, to the extent that such minor permit modification procedures are explicitly provided for in the Montana State Implementation Plan or in applicable requirements promulgated by the administrator.

Q. No Property Rights Conveyed

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(d)

This permit does not convey any property rights of any sort, or any exclusive privilege.

R. Testing Requirements

ARM 17.8, Subchapter 1, General Provisions §105

The permittee shall comply with ARM 17.8.105.

S. Source Testing Protocol

ARM 17.8, Subchapter 1, General Provisions §106

The permittee shall comply with ARM 17.8.106.

T. Malfunctions

ARM 17.8, Subchapter 1, General Provisions §110

The permittee shall comply with ARM 17.8.110.

U. Circumvention

ARM 17.8, Subchapter 1, General Provisions §111

The permittee shall comply with ARM 17.8.111.

V. Motor Vehicles

ARM 17.8, Subchapter 3, Emission Standards §325

The permittee shall comply with ARM 17.8.325.

W. Annual Emissions Inventory

ARM 17.8, Subchapter 5, Air Quality Permit Application, Operation and Open Burning Fees §505 (STATE ONLY)

The permittee shall supply the Department with annual production and other information for all emission units necessary to calculate actual or estimated actual amount of air pollutants emitted during each calendar year. Information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request, unless otherwise specified in this permit. Information shall be in the units required by the Department.

X. Open Burning

ARM 17.8, Subchapter 6, Open Burning §604, 605 and 606

The permittee shall comply with ARM 17.8.604, 605 and 606.

Y. Montana Air Quality Permits

ARM 17.8, Subchapter 7, Permit, Construction and Operation of Air Contaminant Sources §745 and 764
(ARM 17.8.745(1) and 764 are STATE ENFORCEABLE ONLY until approval by the EPA as part of the SIP)

1. Except as specified, no person shall construct, install, alter or use any air contaminant source or stack associated with any source without first obtaining a permit from the Department or Board. A permit is not required for those sources or stacks as specified by ARM 17.8.745(1).
2. The permittee shall comply with ARM 17.8.743, 744, 745, 748 and 764.
3. ARM 17.8.745(1) specifies de minimis changes as construction or changed conditions of operation at a facility holding an air quality preconstruction permit issued under Chapter 8 that does not increase the facility's potential to emit by more than 15 tons per year of any pollutant, except (STATE ENFORCEABLE ONLY until approved by the EPA as part of the SIP):
 - a. Any construction or changed condition that would violate any condition in the facility's existing air quality preconstruction permit or any applicable rule contained in Chapter 8 is prohibited, except as provided in ARM 17.8.745.
 - b. Any construction or changed conditions of operation that would qualify as a major modification under Subchapters 8, 9 or 10 of Chapter 8.
 - c. Any construction or changed condition of operation that would affect the plume rise or dispersion characteristic of emissions that would cause or contribute to a violation of an ambient air quality standard or ambient air increment, as defined in ARM 17.8.804.
 - d. Any construction or improvement project with a potential to emit more than 15 tons per year may not be artificially split into smaller projects to avoid air quality preconstruction permitting.
 - e. Emission reductions obtained through offsetting within a facility are not included when determining the potential emission increase from construction or changed conditions of operation, unless such reductions are made federally enforceable.
4. Any facility making a de minimis change pursuant to ARM 17.8.745(1) shall notify the Department if the change would include a change in control equipment, stack height, stack diameter, stack gas temperature, source location or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emission unit. The notice must be submitted, in writing, 10 days prior to start up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(1). (STATE ENFORCEABLE ONLY until approval by the EPA as part of the SIP)

Z. National Emission Standard for Asbestos

40 CFR, Part 61, Subpart M

The permittee shall not conduct any asbestos abatement activities except in accordance with 40 CFR 61, Subpart M (National Emission Standard for Hazardous Air Pollutants for Asbestos).

AA. Asbestos

ARM 17.74, Subchapter 3, General Provisions and Subchapter 4, Fees

The permittee shall comply with ARM 17.74.301, *et seq.*, and ARM 17.74.401, *et seq.* (State only)

BB. Stratospheric Ozone Protection – Servicing of Motor Vehicle Air Conditioners

40 CFR, Part 82, Subpart B

If the permittee performs a service on motor vehicles and this service involves ozone-depleting substance/refrigerant in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR 82, Subpart B.

CC. Stratospheric Ozone Protection – Recycling and Emission Reductions

40 CFR, Part 82, Subpart F

The permittee shall comply with the standards for recycling and emission reductions in 40 CFR 82, Subpart F, except as provided for MVACs in Subpart B.

1. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
2. Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
3. Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technical certification program pursuant to §82.161.
4. Persons disposing of small appliances, MVACs and MVAC-like (as defined at §82.152) appliances must comply with recordkeeping requirements pursuant to §82.166.
5. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156.
6. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.

DD. Emergency Episode Plan

The permittee shall comply with the requirements contained in Chapter 9.7 of the State of Montana Air Quality Control Implementation Plan.

Each major source emitting 100 tons per year located in a Priority I Air Quality Control Region, shall submit to the Department a legally enforceable Emergency Episode Action Plan (EEAP) that details how the source will curtail emissions during an air pollutant emergency episode. The industrial EEAP shall be in accordance with the Department's EEAP and shall be submitted according to a timetable developed by the Department, following Priority I reclassification.

EE. Definitions

Terms not otherwise defined in this permit or in the Definitions and Abbreviations Appendix of this permit, shall have the meaning assigned to them in the referenced regulation.

APPENDICES

APPENDIX A - INSIGNIFICANT EMISSION UNITS

Disclaimer: The information in this appendix is not State or Federally enforceable, but is presented to assist MDU, the permitting authority, inspectors, and the public.

Pursuant to ARM 17.8.1201(22)(a), an insignificant emission unit means any activity or emissions unit located within a source that: (i) has a potential to emit less than 5 tons per year of any regulated pollutant; (ii) has a potential to emit less than 500 pounds per year of lead; (iii) has a potential to emit less than 500 pounds per year of hazardous air pollutants listed pursuant to Sec. 7412 (b) of the FCAA; and (iv) is not regulated by an applicable requirement, other than a generally applicable requirement that applies to all emission units subject to Subchapter 12.

List of Insignificant Activities:

The following table of insignificant sources and/or activities was provided by MDU. Because there are no requirements to update such a list, the emission units and/or activities may change from those specified in the table.

Emissions Unit ID	Description
EU02	Heating Boiler
EU03	Diesel Fire Pump Engine
EU04	Emergency Generator
EU05	Miscellaneous Space Heaters
EU06	Fuel Storage Tank
EU09	Coal Tripper House
EU10	Lime Storage Silo
EU11	Plant Roads

APPENDIX B - DEFINITIONS and ABBREVIATIONS

"Act" means the Clean Air Act, as amended, 42 U.S. 7401, *et seq.*

"Administrative permit amendment" means an air quality operating permit revision that:

- (a) Corrects typographical errors
- (b) Identifies a change in the name, address or phone number of any person identified in the air quality operating permit, or identifies a similar minor administrative change at the source
- (c) Requires more frequent monitoring or reporting by MDU
- (d) Requires changes in monitoring or reporting requirements that the Department deems to be no less stringent than current monitoring or reporting requirements
- (e) Allows for a change in ownership or operational control of a source if the Department has determined that no other change in the air quality operating permit is necessary, consistent with ARM 17.8.1225
- (f) Incorporates any other type of change, which the Department has determined to be similar to those revisions set forth in (a)-(e), above.

"Applicable requirement" means all of the following as they apply to emissions units in a source requiring an air quality operating permit (including requirements that have been promulgated or approved by the Department or the administrator through rule making at the time of issuance of the air quality operating permit, but have future-effective compliance dates; provided that such requirements apply to sources covered under the operating permit):

- (a) Any standard, rule, or other requirement, including any requirement contained in a consent decree or judicial or administrative order entered into or issued by the Department, that is contained in the Montana State Implementation Plan approved or promulgated by the administrator through rule making under Title I of the FCAA
- (b) Any federally enforceable term, condition or other requirement of any air quality pre-construction permit issued by the Department under subchapters 7, 8, 9 and 10 of this chapter, or pursuant to regulations approved or promulgated through rule making under Title I of the FCAA, including parts C and D
- (c) Any standard or other requirement under Sec. 7411 of the FCAA, including Sec. 7411(d)
- (d) Any standard or other requirement under Sec. 7412 of the FCAA, including any requirement concerning accident prevention under Sec. 7412(r)(7), but excluding the contents of any risk management plan required under Sec. 7412(r)
- (e) Any standard or other requirement of the acid rain program under Title IV of the FCAA or regulations promulgated thereunder
- (f) Any requirements established pursuant to Sec. 7661c(b) or Sec. 7414(a)(3) of the FCAA
- (g) Any standard or other requirement governing solid waste incineration, under Sec. 7429 of the FCAA
- (h) Any standard or other requirement for consumer and commercial products, under Sec. 7511b(e) of the FCAA
- (i) Any standard or other requirement for tank vessels, under Sec. 7511b(f) of the FCAA

- (j) Any standard or other requirement of the regulations promulgated to protect stratospheric ozone under Title VI of the FCAA, unless the administrator determines that such requirements need not be contained in an air quality operating permit
- (k) C of Title I of the FCAA, but only as it would apply to temporary sources permitted pursuant to Sec. 7661c(e) of the FCAA
- (l) Any federally enforceable term or condition of any air quality open burning permit issued by the Department under subchapter 6.

"Department" means the Montana Department of Environmental Quality.

"Emissions unit" means any part or activity of a stationary source that emits or has the potential to emit any regulated air pollutant or any pollutant listed under Sec. 7412(b) of the FCAA. This term is not meant to alter or affect the definition of the term "unit" for purposes of Title IV of the FCAA.

"Excess Emissions" means any visible emissions from a stack or source, viewed during the visual surveys, that meets or exceeds 15% opacity (or 30% opacity if associated with a 40% opacity limit) during normal operating conditions.

"FCAA" means the Federal Clean Air Act, as amended.

"Federally enforceable" means all limitations and conditions which are enforceable by the administrator, including those requirements developed pursuant to 40 CFR Parts 60 and 61, requirements within the Montana State Implementation Plan, and any permit requirement established pursuant to 40 CFR 52.21, or under regulations approved pursuant to 40 CFR Part 51, Subpart I, including operating permits issued under an EPA approved program that is incorporated into the Montana State Implementation Plan and expressly requires adherence to any permit issued under such program.

"Fugitive emissions" means those emissions, which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

"General air quality operating permit" or "general permit" means an air quality operating permit that meets the requirements of ARM 17.8.1222, covers multiple sources in a source category, and is issued in lieu of individual permits being issued to each source.

"Hazardous air pollutant" means any air pollutant listed as a hazardous air pollutant pursuant to Sec. 112(b) of the FCAA.

"Non-federally enforceable requirement" means the following as they apply to emissions units in a source requiring an air quality operating permit:

- (a) Any standard, rule, or other requirement, including any requirement contained in a consent decree, or judicial or administrative order entered into or issued by the Department, that is not contained in the Montana State Implementation Plan approved or promulgated by the administrator through rule making under Title I of the FCAA
- (b) Any term, condition or other requirement contained in any air quality preconstruction permit issued by the Department under Subchapters 7, 8, 9 and 10 of this chapter that is not federally enforceable
- (c) Does not include any Montana ambient air quality standard contained in Subchapter 2 of this chapter

"Permittee" means the owner or operator of any source subject to the permitting requirements of this subchapter, as provided in ARM 17.8.1204, that holds a valid air quality operating permit or has submitted a timely and complete permit application for issuance, renewal, amendment, or modification pursuant to this subchapter.

"Regulated air pollutant" means the following:

- (a) Nitrogen oxides or any volatile organic compounds
- (b) Any pollutant for which a national ambient air quality standard has been promulgated
- (c) Any pollutant that is subject to any standard promulgated under Sec. 7411 of the FCAA
- (d) Any Class I or II substance subject to a standard promulgated under or established by Title VI of the FCAA
- (e) Any pollutant subject to a standard or other requirement established or promulgated under Sec. 7412 of the FCAA, including, but not limited to, the following:
 - (i) Any pollutant subject to requirements under Sec. 7412(j) of the FCAA. If the administrator fails to promulgate a standard by the date established in Sec. 7412(e) of the FCAA, any pollutant for which a subject source would be major shall be considered to be regulated on the date 18 months after the applicable date established in Sec. 7412(e) of the FCAA
 - (ii) Any pollutant for which the requirements of Sec. 7412(g)(2) of the FCAA have been met, but only with respect to the individual source subject to Sec. 7412(g)(2) requirement.

"Responsible official" means one of the following:

- (a) For a corporation: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
 - (i) The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars); or
 - (ii) The delegation of authority to such representative is approved in advance by the Department.
- (b) For a partnership or sole proprietorship: a general partner or the proprietor, respectively.
- (c) For a municipality, state, federal, or other public agency: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a regional administrator of the Environmental Protection Agency).
- (d) For affected sources: the designated representative in so far as actions, standards, requirements, or prohibitions under Title IV of the FCAA or the regulations promulgated thereunder are concerned, and the designated representative for any other purposes under this subchapter.

Abbreviations:

ARM	Administrative Rules of Montana
ASTM	American Society of Testing Materials
BACT	Best Available Control Technology
BDT	bone dry tons
BTU	British Thermal Unit
CFR	Code of Federal Regulations
CO	carbon monoxide
DEQ	Department of Environmental Quality
dscf	dry standard cubic foot
dscfm	dry standard cubic foot per minute
EPA	U.S. Environmental Protection Agency
EPA Method	Test methods contained in 40 CFR 60, Appendix A
EU	emissions unit
FCAA	Federal Clean Air Act
gr	grains
HAP	hazardous air pollutant
IEU	insignificant emissions unit
Mbdft	thousand board feet
Method 5	40 CFR 60, Appendix A, Method 5
Method 9	40 CFR 60, Appendix A, Method 9
MMbdft	million board feet
MMBTU	million British Thermal Units
NO _x	oxides of nitrogen
NO ₂	nitrogen dioxide
O ₂	oxygen
Pb	lead
PM	particulate matter
PM10	particulate matter less than 10 microns in size
psi	pounds per square inch
scf	standard cubic feet
SIC	Source Industrial Classification
SO ₂	sulfur dioxide
SO _x	oxides of sulfur
tpy	tons per year
U.S.C.	United States Code
VE	visible emissions
VOC	volatile organic compound

APPENDIX C - NOTIFICATION ADDRESSES

Compliance Notifications:

Montana Department of Environmental Quality
Permitting and Compliance Division
Air Resources Management Bureau
P.O. Box 200901
Helena, MT 59620-0901

United States EPA
Air Program Coordinator
Region VIII, Montana Office
10W. 15th Suite 3200
Helena, MT 59626

Permit Modifications:

Montana Department of Environmental Quality
Permitting and Compliance Division
Air Resources Management Bureau
P.O. Box 200901
Helena, MT 59620-0901

Office of Partnerships and Regulatory Assistance
Air and Radiation Program
US EPA Region VIII 8P-AR
999 18th Street, Suite 300
Denver, CO 80202-2466

APPENDIX D - AIR QUALITY INSPECTOR INFORMATION

Disclaimer: The information in this appendix is not State or Federally enforceable but is presented to assist MDU, permitting authority, inspectors, and the public.

1. Direction to Plant:

The facility is located 1.5 miles south of Sidney, Montana and is accessed by traveling north on Highway 16 from Sidney and turning east onto Highway 23. Highway 23 borders the facility boundary.

2. Safety Equipment Required:

All visitors are required to check in when arriving on site. Hard hats and safety glasses are required at all times except in office areas or the CEMS shelter. All visitors are required to be accompanied by plant personnel. In situations such as during RATA testing, it is permissible for visitors to go unattended between the office area and the CEMS shelter as needed. Hard hats and safety glasses are available if needed.

3. Facility Plot Plan:

The facility plot plan was submitted with the initial operating permit application on June 10, 1996, and is available for review at the Department offices in Helena.

APPENDIX E - PREDICTIVE OPACITY

Nothing in this appendix is intended to alter the requirements in the Acid Rain Appendix.

1. Pursuant to 40 CFR 51, Appendix P, § 3.9, MDU shall maintain and operate a continuous predictive opacity monitoring system as approved by the Department. The predictive monitoring system shall be used to demonstrate compliance with the applicable six-minute opacity limit.

The predictive opacity monitoring system shall include, at a minimum, instrumentation on the following parameters:

- a. 4 Scrubber Throat Nozzle Flows
- b. Scrubber Slurry Flow to Disk
- c. Disk Position
- d. Scrubber Differential Pressure
- e. Recycling Slurry pH
- f. Recycling Slurry Density (Specific Gravity)
- g. Mist Eliminator Sump Level
- h. Steam Flow
- i. Relative Air Flow
- j. Total Slurry Flow Meter
- k. Total Slurry Flow to Throat Nozzles Meter

The parameters monitored must be used to predict the scrubber disk position and the opacity readings.

2. MDU shall maintain the equation for calculating opacity on a six minute average. Any changes to the predictive opacity equation must be submitted to the Department for approval. MDU shall also submit data as necessary to support the change requested.
3. MDU shall maintain the scrubber disk position calculations. Any changes to the disk position calculations must be submitted to the Department. MDU shall also submit data necessary to support the change requested.
4. MDU shall maintain records for a minimum of 5 years of the log sheets, computerized data, analysis, and calculations used to prepare the required reports.
5. MDU shall submit reports to the Department containing all 6-minute averages equal to or greater than the applicable opacity limit. The summary reports shall be submitted quarterly to the Department.

The quarterly reports must be postmarked by the 30th day after the end of each quarter.

APPENDIX F – SO₂ CEMS

Nothing in this appendix is intended to alter the requirements in the Acid Rain Appendix.

1. Pursuant to 40 CFR Part 75, MDU shall calibrate, maintain, and operate continuous monitoring systems. Heat input shall be determined as required in the 40 CFR 75, Appendix F and the NO_x CEMS Appendix.

Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required pursuant to 40 CFR Part 75, all continuous monitoring systems shall be in continuous operation.
2. The monitor range is set at 0 ppm to 500 ppm. The monitor must have an over-range alarm. MDU shall report any exceedances of the range to the Department. An exceedance of the range is a violation of the 1 lb of SO₂/mmBtu emission limit.
3. MDU shall maintain records for a minimum of 5 years of the log sheets, computerized data, analysis, and calculations used to prepare the required reports.
4. MDU shall submit reports to the Department containing the following information:
 - a. MDU shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which the continuous monitoring system is inoperative.
 - b. MDU shall submit an excess emissions and monitoring systems performance report and/or a summary report form (see paragraph (c) below) to the Department. Written reports of excess emissions greater than 2 lbs of SO₂/mmBtu shall include the following information:
 - i. The magnitude of excess emissions, any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.
 - ii. Any period of time when the monitor range is exceeded. This shall include the date and time of commencement and completion of each time period the monitor is exceeding the range. The process operating time during the reporting period. These periods shall be considered periods of excess emissions.
 - iii. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.
 - iv. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
 - v. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.
 - c. The summary report form shall contain the information and be in the format shown in Figure 1. The summary report form shall be submitted:
 - i. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CEMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in section (b) above need not be submitted unless requested.

- ii. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CEMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in section (b) above shall both be submitted.

Figure 1 – Summary Report
Gaseous Excess Emission and Monitoring System Performance

Pollutant:	
Reporting period dates: From _____ to _____	
Emission Limitation::	
Monitor Manufacturer and Model No.:	
Date of Latest CEMS Certification or Audit:	
Process Unit(s) Description:	
Total source operating time in reporting period:	
Emission Data Summary	
1.	Duration of excess emission in reporting period due to:
	<ol style="list-style-type: none"> a. Startup/shutdown b. Control equipment problems c. Process problems d. Other known causes e. Unknown causes
2.	Total duration of excess emissions.
3.	<u>Total duration of excess emission x (100)</u> = % excess emissions Total Boiler Operating Time
CEMS Performance Summary	
1.	CEMS downtime in reporting period due to:
	<ol style="list-style-type: none"> a. Monitor equipment malfunctions b. Non-Monitor equipment malfunctions c. Quality assurance calibrations d. Other known causes e. Unknown causes
2.	Total CEMS Downtime when the boiler is operating (nearest quarter hour).
3.	<u>Total CEMS downtime when the boiler is operating x 100</u> = % downtime Total boiler operating time.
4.	Total boiler operating time (nearest quarter hour).

The semiannual reports must be postmarked by the 30th day after the end of each 6 month period.

4. MDU shall submit quarterly reports to the Department containing the following information for each month of the quarter:
 - a. Tons of emissions calculated as the sum of $E_h = K \times C_h \times Q_h$ where E_h = emission rate (lb/hr), $K = 1.66 \times 10^{-7}$ (lb/scf)/ppm (SO₂), C_h = Measured Pollutant Concentration (ppm_{wet}), and Q_h = Measured Stack Gas Flow Rate (SCFH_{wet}); and
 - b. A summary report including the information identified in 40 CFR § 75.64 (a)(2) in writing which includes: Tons (rounded to the nearest tenth) of SO₂ emitted during the quarter and cumulative SO₂ emissions for calendar year.

The quarterly reports must be postmarked by the 30th day after the end of the calendar quarter.

5. MDU shall submit copies of all RATAs performed to the Department in accordance with ARM 17.8.106, Source Test Protocol and Procedures Manual.
6. MDU shall submit copies of each monitoring plan revision which results in the need to recertify the CEMS.

APPENDIX G – NO_x CEMS

Nothing in this appendix is intended to alter the requirements in the Acid Rain Appendix.

1. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required pursuant to 40 CFR Part 75, all continuous monitoring systems shall be in continuous operation.
2. MDU shall conduct a “Standard Practice for Ultimate Analysis of Coal and Coke”, ASTM D5291-92, at a minimum of once per year for each type of coal used.
3. MDU shall determine the gross calorific value (GVC) of the fuels using ASTM D2015-91, “Standard Test Method for Gross Calorific Value of Coal and Coke by the Adiabatic Bomb Calorimeter” or other method as identified in 40 CFR Part 75, Appendix F, §3.3.6.2, at a minimum of once per year for each type of coal used.
4. MDU shall conduct a weekly fuel analysis using ASTM D4239-85 or other method approved by the Department.
5. MDU shall maintain records for a minimum of 5 years of the log sheets, computerized data, analysis, and calculations used to prepare the required reports.
6. MDU shall submit reports to the Department containing the following information:
 - a. MDU shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which the continuous monitoring system is inoperative.
 - b. MDU shall submit a monitoring systems performance report to the Department in the format shown in Figure 1.

**Figure 1 – Summary Report
Gaseous Excess Emission and Monitoring System Performance**

Pollutant:	
Reporting period dates: From _____ to _____	
Emission Limitation::	
Monitor Manufacturer and Model No.:	
Date of Latest CEMS Certification or Audit:	
Process Unit(s) Description:	
Total source operating time in reporting period:	
CEMS Performance Summary	
1.	CEMS downtime in reporting period due to: <ol style="list-style-type: none">a. Monitor equipment malfunctionsb. Non-Monitor equipment malfunctionsc. Quality assurance calibrationsd. Other known causese. Unknown causes
2.	Total CEMS Downtime when the boiler is operating (nearest quarter hour).
3.	$\frac{\text{Total CEMS downtime when the boiler is operating}}{\text{Total boiler operating time}} \times 100 = \% \text{ downtime}$
4.	Total boiler operating time (nearest quarter hour).

The reports shall only be required semiannually for each 6-month period. The semiannual reports must be postmarked by the 30th day after the end of each 6-month period.

7. MDU shall submit quarterly reports to the Department containing the following information for each month of the quarter:
 - a. Monthly average coal analysis;
 - b. Coal consumption;
 - c. Other fuels combusted and the amount;
 - d. Tons of emissions calculated as the sum of $E_h = K \times C_h \times Q_h$ where E_h = emission rate (lb/hr), $K = 1.19 \times 10^{-7}$ (lb/scf)/ppm (NO_x), C_h = Measured Pollutant Concentration (ppm_{wet}), and Q_h where E_h = Measured Stack Gas Flow Rate (SCFH_{wet}); and
 - e. A summary report including the information identified in 40 CFR §75.64 (a)(3) through (5) in writing which includes:
 - i. Average NO_x emission rate (lb/mmBtu, rounded to the nearest hundredth) during the quarter and cumulative NO_x emission rate for calendar year.
 - ii. Tons of CO_2 emitted during quarter and cumulative CO_2 for calendar year.
 - iii. Total heat input (mmBtu) for quarter and cumulative heat input for calendar year.

The quarterly reports must be postmarked by the 30th day after the end of the calendar quarter.

8. MDU shall submit copies of all RATAs performed to the Department in accordance with ARM 17.8.106, Source Test Protocol and Procedures.
9. MDU shall submit copies of each monitoring plan revision which results in the need to recertify the CEMS.

APPENDIX H – ACID RAIN

APPENDIX I – Compliance Assurance Monitoring (CAM) Plan

Table – 1 MONITORING APPROACH								
	Indicator #1	Indicator #2	Indicator #3	Indicator #4	Indicator #5	Indicator #6	Indicator #7	Indicator #8
Indicator	Scrubber Slurry Flow	Flooded Disk Position	Differential Pressure	Dust Collector Flow	Flue Gas Temperature	Flue Gas O ₂	Dust Collector Compartment	Disk Deviation
Range	1500 to 4000 gpm	0 to 18 in.	10 to 14 IWC	50000 to 300000 scfm	200 to 420 ° F	2 to 7 %	2 to 4 Compartments	Disk position deviation from predicted
Data Collection Method	Flow meters located after Pump Discharge at disk inlet and disk	Transmitter located at disk shaft	Differential pressure monitor, sensors located above and below disk	Calculated from Dust Collector differential pressure, temperature corrected	Duct Temperature probe in gas duct at Dust Collector	O ₂ Monitor located after economizer before the air heater	Limit switch on control dampers	Calculated from indicators one through seven
QA/QC Practices	Periodic Inspections	Inspected and Calibrated at 6-month outages	Calibrated every 6-months , pressure taps cleaned weekly	Cleaned every 6-months, calibrated yearly	Inspect and clean well during an outage	Calibrated Monthly	Corrective action taken if false indication is observed	Comparison reviewed after cleaning of disk
Monitoring Frequency	Measured Continuously	Measured Continuously	Measured Continuously	Measured Continuously	Measured Continuously	Measured Continuously	Measured Continuously	Measured continuously
Data Collection Frequency	Instantaneous data compiled into 6-minute average	Instantaneous data compiled into 6-minute average	Instantaneous data compiled into 6-minute average	Instantaneous data compiled into 6-minute average	Instantaneous data compiled into 6-minute average	Instantaneous data compiled into 6-minute average	Instantaneous data compiled into 6-minute average	Instantaneous data compiled into 6-minute average
Averaging period	Instantaneous data used	Instantaneous data used	Instantaneous data used	Instantaneous data used for calculations	Instantaneous data used for calculations	Instantaneous data used for calculations	Instantaneous data used for calculations	Daily average calculated from 6-minute averages

Although the complete hard copy of Appendix I is not included in the permit, the contents of Appendix I, MDU's CAM plan remain as applicable requirements as stated in the Title V Operating Permit #OP069101. To receive a hard copy of this appendix, please contact one of the following:

The Department of Environmental Quality
Permitting and Compliance Division
Air Resources Management Bureau
1520 E. Sixth Ave.
P.O. Box 200901
Helena, Montana 59620-0901
Bureau Phone (406) 444-3490

OR

Montana Dakota Utilities Co.
Lewis & Clark Station
400 North Fourth Street
Bismarck, North Dakota 58501
Phone (701) 222-7689